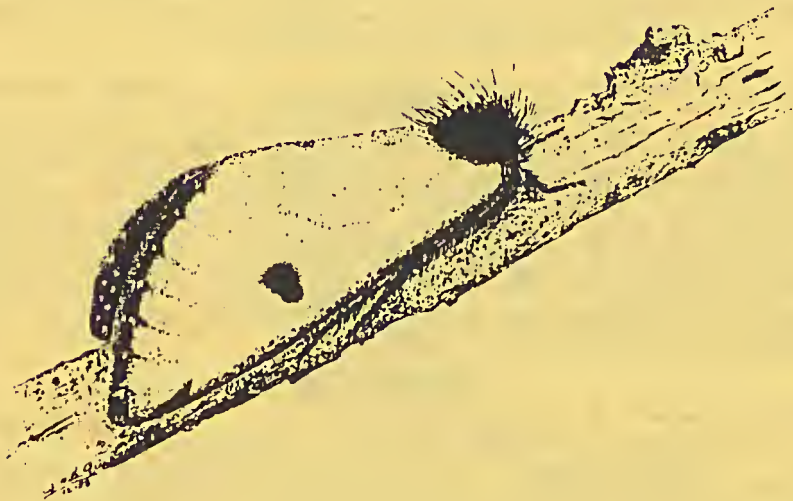


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VICTORIAN ENTOMOLOGIST



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News Bulletin of
The ENTOMOLOGICAL
SOCIETY of VICTORIA



The ENTOMOLOGICAL SOCIETY of VICTORIA (Inc.)

MEMBERSHIP

Any person with an interest in entomology shall be eligible for Ordinary Membership. Members of the Society include professional, amateur and student entomologists, all of whom receive the Society's News Bulletin, the Victorian Entomologist.

OBJECTIVES

The aims of the Society are :

- (a) to stimulate the scientific study and discussion of all aspects of entomology,
- (b) to gather, disseminate and record knowledge of all identifiable Australian insect species,
- (c) to compile a comprehensive list of all Victorian insect species and
- (d) to bring together in a congenial but scientific atmosphere all persons interested in entomology.

MEETINGS

The Society's meetings are held at Clunies Ross House, National Science Centre, 191 Royal Parade, Parkville, Victoria, at 8 pm on the third Friday of even months, with the possible exception of the December meeting which may be held earlier. Lectures by guest speakers or members are a feature of many meetings at which there is ample opportunity for informal discussion between members with similar interests. Forums are also conducted by members on their own particular interest so that others may participate in discussions.

SUBSCRIPTIONS

Ordinary Member	\$10.00
Country Member	\$ 8.00 (100 km + from GPO)
Student Member	\$ 5.00
Associate Member	\$ 2.00 (no magazine)

No additional fee is payable for overseas posting by surface mail of the News Bulletin. Associate Members, resident at the same address as, and being immediate relatives of an Ordinary Member, do not automatically receive a copy of the Society's publications but in all other respects rank as Ordinary Members.

MINUTES OF THE GENERAL MEETING, 9 DECEMBER 1988

The President, K. Walker, opened the meeting at 8.05 pm.

- Apologies:** G. & J. Burns, P. Carwardine
- Present:** M. Braby, J. Burns, K. Clark, M. & P. Coupar, D. Crosby, I. Faithfull, R. & J. Field, D. & J. Holmes, P. Kelly, T. New, O. Rogge, J. Ross, S. Smith, B. Vardy, R. Vagi
- Minutes:** Minutes of the October meeting (Vic.Ent. 18: 99-100) were passed (Kelly/R. Field).

Extraordinary General Meeting

The President drew members' attention to the Notice (Vic. Ent. 18:101) of an Extraordinary General Meeting, called to consider a modification of Clause 13 of the constitution. After some discussion, the resolution as proposed was put to the meeting and adopted unanimously.

Correspondence: Detailed and received (Braby/Clark).

Treasurer's Report: Credit balances are \$2136.60 (General Acct.), \$1744.12 (Le Souf Memorial Fund), \$421.61 (Junior Encouragement Fund). There are at present 90 financial members.

Editor's Report: I. Faithfull reviewed the content of the 1988 Victorian Entomologist, and thanked the authors and production team who had supported him throughout the year. He also gave notice of his intention to step down as Editor after the February issue.

K. Walker, on behalf of all present, paid tribute to Ian's work as Editor and proposed a vote of thanks to him. This was greeted by applause.

A new Editor is needed; offers of help to the President or Secretary as soon as possible, please.

Excursions: M. Braby gave details of the excursion to the Gresswell Forest area on December 11.

- General Business:**
- i. K. Walker offered the Society's congratulations to T. New on his recent appointment as President of the Australian Entomological Society and as winner of the Ian Mackerras Medal.
 - ii. J. Burns suggested that wearing of name tags at meetings would be helpful, especially to new members. Secretary to act.
 - iii. R. Field: a series of slides of immature stages of Lycaonidae, with a challenge to members to identify them.

- iv. M. Braby : a series of slides of the Gram-pians National Park, taken on a field trip with I. Faithfull.
- v. D. Holmes: a case of the various subspecies of Papilio ulysses, from various parts of the New Guinea region. Considerable discussion took place on aspects of the legal 'protection' of butterflies, and the role of overcollecting in butterfly conservation. Many members are concerned over the increasing bureaucracy and needs for permits to collect in many areas.
- vi. M. Braby: larvae of the symmonus skipper. He explained the background to a current attempt to introduce T. symmonus into the La Trobe University Wildlife Reserve, in which areas of the food plant, Lomandra, had been planted.
- vii. M. Braby: an example of a cabinet drawer, together with leaflets from the maker.
- viii. K. Walker: comments on his recent trip, with T. New, to northern Queensland, and a case of bees collected. T. New showed a box of lacewings and one of moths (from Iron Range).
- ix. T. New showed an advance copy of his new book Associations Between Insects and Plants just published by New South Wales University Press.
- x. K. Walker initiated a brief discussion on the new format/content of Australian Entomological Magazine, now produced by the Entomological Society of Queensland.

The meeting closed at 9.30, after which most members present adjourned for supper in the Foundation Room.

T. New,
Secretary.

MISSING ISSUES ?

Have you missed out on receiving any recent issues of the Vic. Ent.? Mistakes can sometimes be made in the mailout and the financial status of members. Please do not hesitate to ask for missing issues to ensure your collection is complete. Those from 14(6) onwards can be obtained from the Hon. Editor. Those prior to December 1984 may be harder to obtain and contact should be made with the Hon. Secretary.



1988 J.C. Le Souëf Memorial Award

MR ROBERT H. FISHER

A pharmaceutical chemist, who owned his own business in Adelaide, Bob Fisher has been collecting butterflies since at least the early 1950s. He is most famous for his book Butterflies of South Australia (1978). Bob is an honorary associate of the South Australian Museum, has been Treasurer and on the committee of the Royal Society of South Australia for a long period and has written insect chapters in that Society's series of regional natural histories of the state. In 1986 he donated his collection of several thousand moths, butterflies and other insects to the S.A. Museum. He is an extraordinarily gifted photographer whose particular study in recent years has been the compiling of a library of colour transparencies of the life history, early stages and biology of Australian butterflies.

The purpose of the Le Souëf Award is to recognise the very substantial role played by amateurs in development of knowledge of our insect fauna. Contributions to the Award Fund will be gratefully received and should be addressed to the Honorary Treasurer.

Previous Winners

- 1983 Mr Keith Hateley (Vic)
- 1984 Mr Geoff Williams (NSW)
- 1985 Mr Max Moulds (NSW)
- 1986 Mr Andrew Atkins (NSW)
- 1987 Mr Bert L. Brunet (NSW)



At night I experienced an attack (for it deserves no less a name) of the Benchuca, a species of *Reduvius*, the great black bug of the Pampas. It is most disgusting to feel soft wingless insects, about an inch long crawling over one's body. Before sucking they are quite thin, but afterwards they become round and bloated with blood, and in this state are easily crushed. One which I caught at Iquique, (for they are found in Chile and Peru,) was very empty. When placed on a table, and though surrounded by people, if a finger was presented, the bold insect would immediately protrude its sucker, make a charge, and if allowed, draw blood. No pain was caused by the wound. It was curious to watch its body during the act of sucking, as in less than ten minutes it changed from being as flat as a wafer to a globular form. This one feast, for which the benchuca was indebted to one of the officers, kept it fat during four whole months; but after the first fortnight, it was quite ready to have another suck.

- Charles Darwin,
The Voyage of the Beagle

COLEOPTERA FROM PLENTY GORGE AND GRESSWELL FOREST
11 DECEMBER 1988

Ian Faithfull, c/o RMB 3263 Mansfield, Victoria, 3722

During the Society excursion I saw or collected the following beetles. Those marked A are from the Plenty River Gorge to the west and south-west of River Avenue, and those marked B are from Gresswell Forest, Bundoora. An S indicates that a specimen was collected.

Scarabaeidae

<u>Aphodius fimetarius</u>	Horse dung	A
<u>Onthophagus granulatus</u>	Macropod dung	A
<u>O. squalidus</u>	Horse dung	S A
? <u>Adoryphorus couloni</u>	One elytron only	S A
? <u>Choiroplatys bifossus</u>	Legless abdomen only	S A
<u>Polystigma punctatum</u>	Floating in river	A

Lycidae

? <u>Metriorrhynchus</u>	In flight mid afternoon	S A
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Coccinellidae

sp.	Pupal case	S B
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Tenebrionidae

<u>Lagria grandis</u>		A
<u>Lepispilus sulcicollis</u>		A
<u>Saragus ?limbatus</u>	Dead	S A
<u>Pterhelaeus ?peltatus</u>	Bluish 'bloom' on elytra	A

Cerambycidae

<u>Phoracantha quinaria</u>	Dead	S B
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Chrysomelidae

<u>Augomela hypochalcea</u>	Several on <u>Dodonea</u>	A
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Curculionidae

<u>Chrysolobus spectabilis</u>	Two seen	A
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This is a small list of mostly ordinary beetles. I'm sorry for the uncertainties. The record of O. squalidus is notable. Mt Drummer (East Gippsland) and Darby Saddle (Wilson's Prom.) seem to be the only published distribution records for Victoria (Matthews, 1972). Of interest also is that the Field Naturalists Club of Victoria held an excursion to the "Plenty River, at Bundoora ... about 12 miles from town" on 17 December 1887. This

continued on page 8.

BUTTERFLY BULLIES BIRDS

Peter Valentine, Geography Dept, James Cook University, Townsville,
Queensland 4811.

The interesting series of observations on birds and butterflies in editions 2,3,4 and 6 of the 1988 *Victorian Entomologist* prompted me to describe a rather different interaction recently witnessed in my garden. In late September (1988) a male *Hypolimnas bolina* set up territory in a sunny glade, selecting a perch about 2 metres from the ground in a central location. At the time there were numerous *Ornithoptera priamus* flying in the garden, mostly males fighting over access to the main vine where adults were emerging most mornings. The *H. bolina* male would fiercely chase the very much larger birdwings, pursuing them for 25-30 metres before returning to perch. Apart from numerous other butterfly species there was also a pair of Magpie-larks (*Grallina cyanoleuca*) constructing a nest in a nearby Eucalypt. On one occasion I watched the butterfly conduct its territorial warfare for over an hour while I was relaxing in the garden. It was with more than a little surprise that I observed a series of attacks on the Magpie-larks. The birds were flying in to a moist patch of earth to collect mud and each time they flew past the butterfly it would chase them. Several times the butterfly flew at a bird standing on the ground and on each occasion the butterfly succeeded in frightening the bird to flight. Typically the Magpie-lark would take flight when the butterfly was about 1 metre from it and it would be pursued for perhaps 10-15 metres. I noticed the same behaviour on other days over a period of a fortnight. Unfortunately I left on an extended fieldtrip at that point and by the time I returned five weeks later the butterfly was not to be seen.

The *H. bolina* also attacked a pair of Peaceful Doves (*Geopelia striata*) with similar effect and on one occasion a Common Myna (*Acridotheres tristis*) This butterfly is often observed along rainforest edges in northern Queensland aggressively defending territory but I have not previously seen this or any other species attacking birds! I should conclude by pointing out that occasionally harmony occurs in the relationships between butterflies and birds. At Iron Range I once saw several birdwing butterflies sharing the massive yellow blossoms of the Golden Bouquet tree (*Deplanchea tetraphylla*) with a somewhat smaller Graceful Honeyeater (*Meliphaga gracilis*).

NOTES ON FIVE SPECIES OF ARCTIIDS COMMON IN THE MELBOURNE
REGION

Pat and Mike Coupar, 143 Brackenbury St., Warrandyte 3113

The moths belonging to the family Arctiidae are known as Footmen or Tiger moths. They are small to medium sized moths, often brightly coloured. Some are diurnal but most are nocturnal and are attracted to lights. They are not generally strong fliers.

One of the larger members of the family is an attractive moth called *Spilosoma glatignyi*. The wings are white with black streaks but the amount of black is extremely variable. The abdomen of this moth is brightly ringed in orange and black and when handled it will feign death and may even show reflex bleeding from the thorax. Mature larvae are about 50mm long, they have a small reddish head capsule and the body is covered in dense orange/brown hairs which may cause skin irritation when handled. We have found the larvae feeding openly during the day on a wide variety of native and introduced herbaceous plants, including Hop Goodenia (*Goodenia ovata*), Groundsel (*Senecio spp.*) and Plantain (*Plantago spp.*). Larvae wander for some time before pupating, often under a log or in debris. They form a loosely woven cocoon incorporating hairs from the body. There are two generations a year in the Melbourne region, with moths emerging in early Spring and Autumn.

Another attractive black and white Arctiid is the Magpie moth (*Nyctemera amica*). The wings are black with large cream blotches and the abdomen, which like the previous species is ringed in orange and black. *Nyctemera amica* is both nocturnal and diurnal and is probably unpalatable to birds. They fly for most of the year but are particularly common during the warmer months. Mature larvae of this species are about 25mm long and are black with a dorsal orange stripe and lateral orange dots.

Occasionally in late winter we have found larvae with blue dots instead of orange. The body is covered with black bristles which seem to be harmless. Near the head are two forward projecting tufts of hair which resemble antennae. The larvae are commonly found feeding during the day on Groundsel (*Senecio spp.*). They are also known to feed on Cinerarias. Pupation occurs in a loosely woven cocoon amongst debris, and lasts from 2 - 6 weeks.

Two of the small common Arctiids around Melbourne are the Clouded footman (*Xanthodule ombrophanes*) and *Palaeosia bicosta*. The larvae of both species feed on lichens growing on woody shrubs and trees, such as Sweet Bursaria (*Bursaria spinosa*), Wattles (*Acacia spp.*), Cherry Ballart (*Exocarpos cupressiformis*) and Eucalypts (*Eucalyptus spp.*). Mature larvae of both species are about 20mm long, grey/brown and densely hairy. We have found the hairs of the larvae and pupae to be non-irritant. Pupation occurs in a flimsy cocoon attached to a twig. The female of the Clouded footman (*Xanthodule ombrophanes*) has only rudimentary wings and after mating she lays her eggs on the outside of the cocoon. The male has mottled cream and brown forewings and pale yellow hindwings. However the sexes of *Palaeosia bicosta* are similar with greyish/brown forewings and pale yellow hindwings. The moths are nocturnal and fly during the warmer months of the year.

The Heliotrope moth (*Utetheisa pulchelloides*) is a delicately patterned species, its white forewings are spotted with red and black, the hind wings are pale blue and black. Like *Spilosoma glatignyi* the moths will feign death and show reflex bleeding from the thorax. They are mostly nocturnal but can sometimes be seen flying during the day. The larvae are grey with orange markings and covered with tufts of hair. They feed on plants belonging to the family Boraginaceae including Salvation Jane (*Echium plantagineum*), Common Heliotrope (*Heliotropium europaeum*) and Forget-me-not (*Myosotis*

arvensis). Pupation occurs in a silken cocoon in debris. This is an extremely widespread Arctiid and around Melbourne may be seen flying from October to April.

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'PRELIMINARY DISTRIBUTION MAPS OF BUTTERFLIES IN VICTORIA'
Published by the Entomological Society of Vic.

Maps of the recorded distributions of the 108 species of butterflies known from this state, plus associated information about the ENTRECS Scheme. Cost \$10.00 plus \$2.00 postage and handling, from:

David Crosby,
ENTRECS Co-ordinator
74 Gipps Street
East Melbourne, 3002
Tel. 417 6345

From page 4.

locality is not far from Plenty Gorge. Dudley Best reported (1888) that the area was "noted for the many and rare species of coleoptera to be obtained there" and recorded 12 longicorns and 20 buprestids.

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M.J. MANSKI. THE ENTOMOLOGIST WITHOUT A NET

Kelvyn Dunn, Flat 1, Island View Villas, Mungar Rd., Maryborough,
Queensland, 4650

Martin Joseph Manski was born on the 27th February 1897 in a house on the corner of Fort Lane and Queen Street, Maryborough, Queensland. His parents were free settlers who emigrated from Germany and arrived in Maryborough on 10th May 1885.

M.J. Manski says his lifelong interest in entomology commenced at about the age of four or five when he discovered the attractive caterpillars and burnished silver chrysalids of Euploea core, the common crow butterfly, on oleander in the front garden of his home. The metamorphosis of those insects to the adult stage so enthused 'Joe' that he began to search out other butterfly varieties for similar purpose. Within a short time he was rearing various Papilio species on Citrus and the familiar Graphium species on camphor laurel and custard apple trees.

At the age of seven Joe recalls attending school and being curious about a sudden appearance of swarms of Eurema and Ana-phaeis java, which "the lads chased with switches". At a similar time Joe's mother received her first introduction to his entomological pursuits. When about to wash his school clothes she found the pockets filled with the larvae and pupae of Catopsilia collected from nearby Cassia trees.

When he turned fourteen Joe left school and took up a position as office boy at the Maryborough Co-operative Dairy Companies office. Later, on 6th January 1913, Joe took on his life career with the Postmaster-Generals' (PMG) Department, commencing as a telegraph messenger in Maryborough. He recalls the early days when he used to deliver telegrams at night, long before the advent of bitumen roads, and with a small kerosene bicycle lamp as the only means of illumination. In those days, says Joe, "it was not uncommon for the postman to be out on delivery all day without any breaks for lunch and such things

as overtime and penalty rates were unknown."

Aside from his employment and growing interest in insects, bird watching and fishing, Joe's attentions became directed to social activities and at a local dance he met a girl, Mona, who later became his wife. Joe was married on the 19th June 1920.

About six years later an adventure began with a promotional transfer to the post office at Innisfail, a small town in the far north of Queensland, set amongst luxuriant rainforest : a delight for any budding naturalist. Joe comments "I soon took up the studies of butterflies and watched the egg laying, food-plants and collected pupae and larvae of many species new to me." Amidst his enthusiasm Joe was perhaps a little too obvious in his activities and was soon labelled by the ill-informed as a "butterfly crank", despite the fact that he rarely carried a net, being an observer rather than a collector.

A further transfer to Cairns in 1931 resulted in the exciting experience of rearing Ornithoptera priamus euphorion, the Cairns birdwing, on Aristolochia indica. Joe was continually occupied with the early stages of local Delias species, Eurema and Acraea. He also recalls collecting the early stages of Papilio ulysses at Kuranda in August 1932.

In his diaries Joe noted: "on 27th November 1932 an Englishman L.E. Couchman installed the new printing press in the Cairns Post Newspaper. I took him to the Reservoir road and we found Papilio polydorus (sic) on Aristolochia doltantha." L.E. Couchman is now a well known collector of Australian butterflies residing in Tasmania.

Engrossed in his pursuits, Joe sought no publication or recognition of his activities until Mr W.H. Hemingway, the honorary entomologist to Auckland War Museum, on a visit to Cairns, heard of his expertise. Dr. G.A. Waterhouse of Sydney contacted Joe, encouraging him to record the life histories of the local butterflies and to make a preserved reference collection. Waterhouse sent Joe a copy of his publication, the now historic text, What Butterfly Is That?, which in 1932 was hot off the press. After receipt of correspondence on life histories

from Manski Waterhouse was enthralled and replied that his book has now been made "obsolete". Waterhouse assisted Joe in becoming a Fellow of the Royal Entomological Society.

In the mean time Joe's interests expanded to the Filicopsida and it was not long before he had discovered two fern species new to Australia at Babinda Boulders. These were sent to C.T. White, the Government Botanist, who illustrated them.

During his residence at Cairns he reared many species including Vindula arsinoe, Arhopala micale, Hypochrysops apollo, Hypolycaena phorbis and Hasora hurama, but his most publicised discovery was the life history of the giant Hercules moth, Coscinocera hercules, which received attention in the local newspapers at that time. The Cairns Post (Hercules moth. Its life history. Valuable record compiled. December 4, 1935) reported: "Two and a half years' efforts by Mr M.J. Manski of Cairns have resulted in his compiling the life history of the hercules moth which achievement has brought his name into prominence in Australian entomological circles and has earned the eulogy of Dr G.A. Waterhouse, the Australian authority on butterflies ..."
Erroneous comments by Tillyard in Insects of Australia and New Zealand that cocoons of the Hercules moth were found in the forks of giant trees in rainforest, had delayed the discovery of its life history, Joe claims. "I found the cocoons amongst leaves and berries, no higher than 4 feet from the ground!" Joe received a Diploma from the trustees of the Australian Museum, Sydney, making him an Honorary Correspondent of the Australian Museum, on account of his valuable services to the Museum at that time. The Cairns Post (op. cit.) also wrote: "The Sydney Museum authorities have stated that they have never seen anything so comprehensive as this life history, and would have much appreciated its publication in the Australian Museum Magazine."

During the late 1930s Joe began studying fruit flies, rearing them from native berries. A new dipteran species reared from the berries of Strychnos was named in his honour Strumeta manskii. It was in these same berries that he found

larvae of Virachola democles. Joe remembers vividly the find. "June 12th 1937, Mr L. Franzen and I went to the junction of the Barron River and Stoney Creek collecting butterflies. Mr Franzen was occupied with the Euploeas and I was looking for foodplants, when I saw many berries of Strychnos lying on the ground. I noticed many of them had holes in them so I called out to Franzen ...". Manski and Franzen obtained the whole life history of V. democles, a species previously known only from two males in the British Museum (Natural History), London, and one male in the Australian Museum, Sydney.

Due to ill health, Joe shifted to Brisbane in January 1941, and spent many enjoyable hours collecting insects with L. Franzen and Mr F. Smith at Ashgrove. He also had the opportunity to peruse Dr Jefferis Turner's butterfly collection, which later became part of the Australian National Insect Collection in Canberra. During his period in Queensland's capital Joe visited other naturalists including Messrs Hacker, Beck, C.T. White, Caldwell, Perkins and Blake.

In 1945 he successfully applied for transfer to his birth town and was placed in the Inspection Branch until retirement in 1962 after 49 years of service. He then "started collecting in earnest". Joe and a companion, Cyril Tipping, cycled to various destinations in the Maryborough district to investigate plants and insects. Joe soon developed an interest in jewel beetles and found numerous varieties locally. In recent times Joe has had few days in the field, but recalls some favourable ones with Ray and Nola Manskie of Maryborough in the early 1980s. His eyesight has diminished which now makes field studies difficult for him.

Sadly, his wife Mona became allergic to the fumigant paradichlorobenzene used in his collection of insects, so the collection was sold to the University of Queensland in 1963. Joe's wife of "61 years of married bliss" passed away on 8 September 1981. Joe currently resides in a retirement village, Wahroonga, in Neptune Street, Maryborough. He has authored various articles on butterflies and plants during a period commencing in 1933 and his final paper, Foodplants of some Queensland Lepidoptera,

Queensland Naturalist 16(3,4):68-73 appeared in 1960. All of M.J. Manski's articles are listed in M.S. Moulds(1977) Bibliography of Australian Butterflies 1773-1973, pp. 152-153.

As a concluding statement I will quote Hemingway from his Guide to the Insect Wonder House. "None have I met who bring to bear more desirable qualities than does Mr Manski. Not only is he endowed with the qualities of patience and thoroughness, but to his entomological research he brings a knowledge of field botany that is second to none." M. Joe Manski is the oldest entomologist in Australia and will be 92 this February.

Acknowledgement

I sincerely thank Joe Manski for providing all the necessary information to make this brief biography possible.

ON THE GRAPEVINE



Russell Mayo has been collecting butterflies around the Singleton area in the Hunter Valley. A buprestid he collected some time ago has been named Stigmodera mayoiana and Russell is most honoured. He reports a poor season for jewel beetles in the Gosford area and the poorest season that he can remember around Sydney for butterflies (too wet). He has recently visited Grant Miller in Lismore, NSW, and had a look at his collection and also went to south-east Queensland.

Andrew Atkins has been observing courtship behaviour in Trapezites skippers and would be interested to hear of details of any female-male interactions in T. symmopus. It's been an unusual summer in his area too, with pre-Christmas emergences of Heteronympha banksii and Anisynta dominula in the mountains near Newcastle.

Michael Braby is currently in Townsville where he intends to continue his studies at James Cook University.

John Burns has discovered some nice colonies of Jalmenus ictinus not far from Melbourne. John is expected to be the new Editor of this News Bulletin.

On The Grapevine is continued on page 19.

THE ENTOMOLOGICAL SOCIETY OF VICTORIA (INC.)

MEMBERSHIP APPLICATION

APPLICANT: Full Name
Address
.....Postcode.....
Interests

I hereby apply for ordinary/ country/ student/ associate/
life membership of the Society, and if elected, agree to be
bound by the provisions of the Constitution.

SignatureDate.....

PROPOSER: Full Name
Address
.....Postcode.....
SignatureDate.....

SECONDER: Full Name
Address
.....Postcode.....
Signature.....Date.....

Membership Categories:

1. ORDINARY MEMBERS are persons over the age of 18 years paying an annual subscription to the Society.
2. COUNTRY MEMBERS are ordinary members who reside more than 100 kilometres from the Melbourne G.P.O.
3. STUDENT MEMBERS are persons under the age of 18 years or who are bona fide full-time students of a school, college or university, paying an annual subscription to the Society.
4. ASSOCIATE MEMBERSHIP is restricted to the immediate family of any person annually paying an Ordinary Membership subscription to the Society, and who are resident at the same address as that person. Such Associate Members are not entitled to receive the Society's publications, but in all other respects they rank equally with Ordinary Members.
5. LIFE MEMBERS are Ordinary Members who have paid a single lump sum to cover all future membership subscriptions during their lives.

PLEASE RETURN TO THE SECRETARY, Dr.T.R.Neu, Zoology Dept.
LaTrobe University, Bundoora, Vic., 3083.

RECENT ARTICLES OF INTEREST

Muriel Reddy, A lifetime in pursuit of elusive beauty. The Age 24 Jan. 1988, p.3. Short biography of Archie May, 80 year old Cann River apiarist and entomologist famous for his insect collection and hospitality to children. His \$2.5 million gold mine. Nice photo with a pinned specimen of Papilio negeus on Buddleia flowers; "Mr Archie May ... admires a beautiful example of his quarry near his home ... 'I never did it for the money, only for the interest', he says of his prize collection."

CSIRO gears up for Russian aphid invasion. Weekly Times 2 Nov. 1988, p.17. Diuraphis noxia spread from the Black and Caspian seas to west Europe in 1945, to Ethiopia, South Africa (where 600,000 ha were sprayed to control it in 1980), Mexico (1980) & Alberta, Canada (October 1988). Crop yields can be reduced by up to 80%. Dr Dick Hughes is assessing the risk in Australia and preparing a plan to deal with infestations (CSIRO Rural Research, Spring 1988).

'Partnership' to raise mite predators. Weekly Times 23 Nov., p.3. Northern Vic. fruitgrowers, Cropwatch & Dhurringle Rehab. Centre have combined to breed large numbers of a pesticide resistant strain of the predatory mite Typhlodromus occidentalis for use in controlling orchard mite pests.

First gas tight silo. Weekly Times 30 Nov., p.4. Aust's first prefab gas tight silo has been installed at Berriwillock in the Mallee to protect field peas from pea weevil, Bruchus pisorum (Bruchidae). Details of its construction and operation.

Leith Young, Hanging them high in fight of the humble bee. The Age 12 Jan. 1989, p.6. In an attempt to clear honeybees from tree hollows of redgum, Wyperfeld N.P. managers have been hanging pest strips. The Regent Parrot is thought to have been displaced by the bees.

Pitcher plants give as good as they get. New Sci. 120(1644/5):27, 24-31 Dec. 1988. Large quantities of nectar in the flowers are real rewards to visiting insects, only a small proportion of which are caught and digested (Biol.J.Linn.Soc. 35:185).

Omar Sattaur, Pheromones add a new twist to cotton crops. New Scientist 121(1646):35, 7 Jan. 1989. Pakistani farmers have finished successful testing of plastic twist-tie pheromone lures for control of cotton bollworm (Heliothis sp., Noctuidae).

David Knowles (photographer), Photoart : jumping spiders. 7 spp. mostly from Bali. Aust.Nat.History 22(11):501-3, Summer 1988-9

David Thompson, Dragons and damsels. An in-depth penetration of their sexual strategies. Aust.Nat.History 22(11):506-10. Males of some spp. of dragonfly have penes which pack sperm already deposited by other males into parts of the female sperm storage areas remote from the oviduct. Most damselflies and some dragonflies have penes that are used to remove the sperm of other males before inserting their own. Behavioural ecology studies,

RECENT ARTICLES OF INTEREST (CONTINUED)

including one of 4,000 individuals of Coehagrion puella which visited an isolated pond in England, show that predator avoidance and feeding efficiency are of more importance than sexual selection in determining mating success.

L. Metzeling, Description of the fourth instar larva & pupa of Dasyomma tonnoiri Paramonov (Diptera:Atbericidae). Aust.Ent.Mag. 15(4):117-8, 30 Nov.1988. First description of the immature stages of Aust. spp. of family first characterised in 1973.

R.G. Pipor, Larval aggregations in Aedes vigilax (Skuse)(Diptera: Culicidae).Aust.ent.Mag. 15(4):119-21. Dense clumps of saltmarsh mosquito larvae in coastal pools in N. Qld. The combined feeding activity of such larvae is thought to disturb bottom particles and enhance food supply.

Alan J. Graham, The life history of a semi-arid population of Croitana croites (Hewitson), (Lepidoptera:Hesperidae). Aust.ent. Mag. 15(4):123-6. Egg, larval instars & pupae described, illustrs. by Andrew Atkins. Foodplant Stipa platychaeta. Range extension to eastern goldfields of W.A., ie some 600 km. Distinguishing features of the Kalgoorlie, Northern and Southern populations.

C.N. Smithers, New records of Australian Nymphidae. Aust.ent. Mag. 15(4):141-3. Significant distribution extensions represented by specimens in the Australian Museum as compared with T. New's 1981 revision of this family of Neuroptera.

J.R. Hosking & W. Danthanarayana, Low level flight activity of Nesoclitia pallida (Evans), Orosius argentatus (Evans) and Zygina zealandica (Myers) (Hemiptera:Cicadellidae) in southern Victoria. J.Aust.ent.Soc. 27(4)241-9, 29 Nov. 1988. At Bundoora & Toolangi the temp.ranges, wind speeds favourable to flight, times of flight (activity peaks at sunset, & sunrise for zealandica) and height above ground for leafhoppers.

D.K. Yeates & C.E. Hagan, Revision of the Aust. spp. of Systropus Wiedemann (Diptera: Bombyliidae). J.Aust.ent.Soc. 27:251-5. Wasp mimicing bee flies. Key to 2 Aust. genera of Systropodinae and 2 Aust. spp. of Systropus from Qld. Male of S. doddi described and its behaviour briefly detailed.

M.A. Horwood, Control of Pheidole megacephala (F.) (Hymenoptera: Formicidae) using methoprene baits. J.Aust.ent.Soc. 27:257-8. Coastal brown ant had made large nest in walls, etc. in labs & insectaries at the Biological & Chemical Research Institute. Alternatives to conventional insecticides were needed so as to protect insect cultures. The juvenile hormone analogue was mixed with peanut butter and total control was achieved in 20 weeks.

Ian C. Campbell & Phillip J. Suter, Three new genera, a new subgenus and a new sp. of Leptophlebiidae (Ephemeroptera). J.Aust. ent.Soc. 27:259-73. Austrophlebioides, Garinjuga, Koornonga gen. nov., Australonousia subgen. n. , G. maryannae sp. n.

RECENT ARTICLES OF INTEREST (CONTINUED)

J.P. Aeschlimann & Janine Vitou, Comparing infestations by Sitona discoideus Gyllenhal (Coleoptera:Curculionidae) on Mediterranean & Aust. Medicago spp. accessions (Leguminosae) in Southern France. J.Aust.ent.Soc. 27:275-8. The Sitona weevil, a pest of medics in SE Aust, is shown to have no preference for any one species line.

Z. Mazanec, Immature stages and life history of Chrysonotomyia sp.C (Hymenoptera:Eulophidae), a parasitoid of the Jarrah leaf-miner. J.Aust.ent.Soc. 27:279-92.

R.E. Teakle & V.S. Byrne, Food selection by larvae of Heliothis armigera (Hübner)(Lepidoptera:Noctuidae) on grain sorghum. J.Aust.ent.Soc. 27:293-6. This cutworm is a pest of many crops & has developed resistance to commonly used insecticides. On sorghum the 5th & later instar larvae feed on ovaries & so cause economic damage. Early instars feed almost exclusively on anthers.

David G. James, Fecundity, longevity and overwintering of Trisolcus biproruli Girault (Hymenopt:Scelionidae) a parasitoid of Biprorulus bibax Breddin (Hemiptera:Pentatomidae). J.Aust.ent.Soc. 27:297-301. The spined citrus bug has become a major pest in the MIA & Sunraysia since 1975. This parasitoid seems to play a major part in population regulation of the pest. Virgin & mated females produced 58 & 98 progeny during adult lives of 24 & 20 days respectively, mainly in the first days of adulthood. Unfed parasitoids died in 4 days. Winter reproduction requires sunlight exposure and female overwintering is usual.

T.A Heard, Propagation of hives of Trigona carbonaria Smith (Hymenoptera:Apidae). J.Aust.ent.Soc. 27:303-4. The native honeybee or stingless bee is thought to be an important pollinator of tropical & subtrop. crops. Transfer of only the brood chamber from natural locations to simple wood box hives was best.

M.W.J. Crosland, R.H. Crozier & E. Jefferson, Aspects of the biology of the primitive ant genus Myrmecia F. (Hymenoptera:Formicidae). J.Aust.ent.Soc. 27:305-9. Some bullant workers are unable to emerge from their cocoons without the help of other ants. Workers of some species have functional ovaries and a spermatheca and can lay eggs. A nuptial flight is described as also is an ergatandromorph (an aberrant individual with both male and worker regions).

Ernest S. Delfosse, Echium appeal won by CSIRO. Aust.Ent.Soc. News Bulletin 24(4):149-52, Nov. 1988. Short history of Patersons Curse and CSIRO endeavours to control it with natural enemies.

Zoological Catalogue of Australia Volume 6, Ephemeroptera by I. Campbell, Megaloptera by G. Theischinger and W.W.K. Houston, Odonata by W.W.K. Houston and J.A.L. Watson, Plecoptera by F.B. Michaelis and C. Yule, Trichoptera by A. Neboiss. The aquatic orders; Mayflies, Alderflies, Dragon- and Damselflies, Stoneflies and Caddis-flies. Australian Government Publishing Service, \$29.95 (includes postage), GPO Box 84, Canberra, 2601.

RECENT ARTICLES OF INTEREST (CONTINUED)

M.G. Chukhril, An Atlas of the Ultrastructure of Viruses of Lepidopteran Pest of Plants. Transl. from Russian by V. Kothekar. Balkema Books, 281 pp., Sept. 1988, \$55.50

J.P. Duffels, The Cicadas of the Fiji, Samoa and Tonga Islands. Their Taxonomy and Biogeography (Homoptera, Cicadoidea). c.150 pp., cloth bound, E.J. Brill, Entomograph 10, 1988. \$36.75.

Willis W. Wirth & William L Grogan, The Predaceous Midges of the World (Diptera: Ceratopogonidae: Ceratopogonini). Flora & Fauna Handbook 4, E.J. Brill, c.108 pp., 1988, \$29.50. Includes 10 n. gen. from s. hemisphere. Checklist of 851 described world spp.

Guide to Collecting Requirements for Australian Terrestrial Flora and Fauna. Bureau of Flora & Fauna, AGPS, Canberra, 1986, 13 pp.\$1.50. Brief guide to the procedures which must be followed and the organisations to contact prior to collecting flora and fauna for research in the States, Territories & Oceanic Islands of Aust.

G.B. Monteith, Australian federal import/export controls on insect specimens and their effect on insect conservation. pp. 21-30 in Major, J.D. (ed), The Role of Invertebrates in Conservation and Biological Survey. WA Dept. Conservation & Land Mgt. Report, 1987. Origins of the Act, CITES, the permit system, trade, conservation effects.

L.M., R.K. & D.R. Johnston, Butterflies of Cape Tribulation 26 Sept - 8th Oct 1982. Queensland Naturalist 26(1-4):30-1.

D.K. Yeates, Altitudinal transect studies at Cape Tribulation North Queensland IV. The March Flies (Diptera:Tabanidae).. Queensland Naturalist 26(1-4):58-61.

E.N Marks, Alt. trans. studies at Cape Trib. NQ V. Mosquitoes (Diptera:Culicidae) with notes on additional collections. Queensland Naturalist 26(1-4):62-6.

A.L. Dyce, Alt.trans.studies VI. Culicoides (Diptera:Ceratopogonidae). Queensland Naturalist 26(1-4):67-9.

G.B. Monteith, Alt.trans.studies VII. Coleoptera and Hemiptera (Insecta). Queensland Naturalist 26(1-4):70-80.

G.B. Monteith, Some curious insect-plant associations in Queensland. Queensland Naturalist 26(5-6):105-14. Ant plants; breeding in water-filled tree holes; pitcher plants & sundews; ants & lycanids as shelter; insect seed dispersal; the dung mimicing arum lily pollinated by dung beetles.

K. Lambkin, The Neuroptera and Megaloptera (Insecta) of Fraser Island. Queensland Naturalist 27(5-6):7-14, April 1987.

ON THE GRAPEVINE

ABC television is using a cicada wing in one of its station identification logos. Any guesses on the species?

Australian Entomological Supplies have moved to new premises. The PO address remains the same. Alan Frazer reports that things are gradually returning to normal after the disruption to business.

David Crosby is currently writing up his study of the Altona Skipper (flavescens). The Ocybadistes walkeri paper has been completed.

Kelvyn and Jodie Dunn visited Rod Eastwood at Surfers Paradise in early December and examined part of his butterfly collection. Rod also has a collection of cicadas. Rod recently travelled to Townsville where he saw Steve Johnson and went collecting for Acrodipsas and Hypochrysops at various localities. Kelvyn stopped off to see Max Moulds in Sydney and looked at Max's cicadas before coming to Melbourne to stay with his parents over Christmas. Kelvyn reports a lovely water temperature of 27 degrees C at Rainbow Beach but unfortunately it rained during the visit and he saw very few butterflies. At Maryborough some large cicadas, Marcrotristria angularis, were singing loudly in the first part of December in the evening after rain. Some specimens came to light at night. Kelvyn has taken up a position at the Plant Research Institute, Burnley, as a Technical Officer in plant pathology and entomology, after a short but glorious career in the teaching service.

Ray Manskie has been rearing various skippers including Sunianas from along the Mary River. He has been exchanging specimens with Hugh Bollam of Perth and has received some beautiful examples of Ogyris and Jalmenus from Western Australia.

Hugh and Peter Valentine went collecting in the Stirling Ranges (W.A.) just before Christmas. They were successful in rediscovering Ogyris otanes which had not been seen there for 80 years. Examples have been sent to the ANIC and the Museum in Perth.

Ken Clark reports a very interesting time in Townsville with his breeding boxes working overtime. Around the end of December a large laurel in the garden sported numerous larvae in all stages of the Blue Triangle. A large bug was having a busy time killing off some of the young ones. The Cairns Birdwing was plentiful, a friend having so many that he sent 60 larvae to Butterfly World at Saunders Beach. On the same Aristolochia (probably tagala) vine were a very beautiful looking lot of larvae and pupae of the Big Greasy.

More On The Grapevine on page 13.



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AUSTRALIAN ENTOMOLOGICAL SOCIETY
20TH AGM AND SCIENTIFIC CONFERENCE
MACQUARIE UNIVERSITY SYDNEY 3-6 MAY 1989
'INSECTS '89: PROSPECTS AND PROBLEMS'



Chemical control of insects and mites, biological and integrated control, medical and veterinary entomology, current investigations in ant biology, advances in systematics, hormones and physiology; A.R. Woodhill Memorial Address- Prof. F.J.D. McDonald; Insects in perspective; Annual Dinner.

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The Society welcomes contributions of articles, papers or notes pertaining to any aspect of entomology for publication in the New Bulletin. Contributions are not restricted to members but are invited from all who have an interest. Material submitted should be responsible and original. Statements and opinions expressed are the responsibility of the respective authors and do not necessarily reflect the policies of the Society. It is of great assistance if contributions are typed on paper of A4 (International Quarto) size, one and a half spaced with triple spacing between paragraphs and a margin of 3 cm.

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The new Editor of the Victorian Entomologist is expected to be John Burns. Material for forthcoming issues should be sent to him at 274 Church Street, Templestowe, Vic., 3106.

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DIARY OF COMING EVENTS

Friday 17 February	- General Meeting.
8 pm	Gordon Berg, Plant Research Institute. <u>"Biocontrol of Pasture Cockchafer"</u>
17 March	- Council Meeting
21 April	- General Meeting. Members' short talks
19 May	- Council Meeting
16 June	- Annual General Meeting

Scientific names contained in this document are not intended for permanent scientific record, and are not published for the purposes of nomenclature within the meaning of the International Code of Zoological Nomenclature, Article 8(b). Contributions are not refereed, and authors alone are responsible for the views expressed.

